

Notice of Allowability

Application No.

10/813,972

Examiner

John J. Figueroa

Applicant(s)

SUNDAR ET AL.

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment After Non-Final Rejection (6/1/2007).
2. ☒ The allowed claim(s) is/are 1-11 and 16-20.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received:
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Bruce M. Monroe on August 11, 2007.

The application has been amended as follows:

Please cancel claims 12-15.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance: the prior art does not teach or suggest a process for preparing a dispersion of a polyurethane/acrylic copolymer that comprises:

a) treating a polyol having a molecular weight of 500-3000, with 150 -200 mole % of a (cyclo)aliphatic or aromatic isocyanate at a temperature of 40-150°C. for a period of at least two hours to obtain an isocyanate terminated prepolymer;

b) adding 50-100 mole % (based on the (cyclo)aliphatic or aromatic isocyanate) of an iniferter diol isocyanate and 0.1-0.3 mol % of catalyst to the isocyanate terminated pre-polymer, in an organic solvent, under agitation at a temperature not exceeding 40°C. for a period of 15-30 hrs to obtain an iniferter incorporated polyurethane;

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c) treating 25-400% w/w of a vinyl monomer, from vinyl monomers containing carboxyl or sulfonic acid groups, with the iniferter incorporated polyurethane for a minimum of 12-hours at a temperature in the range of 50-80°C. to obtain a urethane/acrylic copolymer;

d) adding 0.01-0.1 mole % of base to said copolymer under agitation at a temperature in the range of 30-80°C. for a period of minimum at least one hour to obtain a slurry, and

e) dispersing the slurry in 150-200% v/v of water to obtain the dispersion of the polyurethane/acrylic copolymer.

The closest reference is USPN 6,239,209 B1 to Yang et al., hereinafter 'Yang'. Yang does not disclose or suggest a process for forming a dispersion containing a polyurethane/acrylic copolymer but forms a dispersion that contains an interpenetrating polyurethane and acrylic network. Nor does Yang teach or suggest forming a polyurethane precursor by adding an iniferter to the isocyanate-terminated prepolymer.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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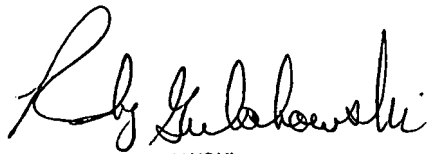
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Figueroa whose telephone number is (571) 272-8916. The examiner can normally be reached on Monday-Thursday 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JJF/RAG


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